THE BIRDS OF WALLA WALLA AND COLUMBIA COUNTIES, SOUTHEASTERN WASHINGTON.

BY LEE RAYMOND DICE.

(Continued from p. 51.)

Otocoris alpestris arcticola. Pallid Horned Lark.—S. H. Lyman reports a specimen of this form taken near Walla Walla during the first part of March a few years ago.

Otocoris alpestris merrilli. Dusky Horned Lark.—The most abundant bird of the bunch-grass habitat throughout southeastern Washington. In early June, 1914, numbers of adults and nearly grown young were seen on the bunch-grass hills near Wallula and Nine-mile. They were especially numerous on wind swept ridges. In the grain fields and bunch-grass areas of eastern Walla Walla County they are abundant throughout the year. Although they often come very near timber in the valleys, they are never found among trees.

On April 10, 1905, a young Horned Lark, just able to fly, was seen in the hills near Prescott. On April 18 a nest containing a full set of three eggs was found. On April 12, 1906, a nest with three partly feathered birds was seen. This nest was deserted on the 22nd. On March 27, 1908, one nest of three eggs and another with two eggs were found in a stubble-field. All of these nests were composed of dried grasses and weed leaves, and the rim of the nest was flush with the level of the ground. Each nest was in such a position that it was partially concealed by a clump of stubble or of weeds. On April 7, 1908, a young bird fully feathered and able to fly was seen.

Horned Larks often follow the plows and other farm implements to pick up the insects, larvæ, and seeds which are exposed when the ground is stirred up. The Horned Lark is one of the few birds that the advance of agriculture has not reduced in number. Most of the other prairie birds find difficulty in rearing broods, because the spring plowing practiced in the region destroys the nests, but many young of the Horned Lark are able to fly before plowing is well under way.

Pica pica hudsonia. Magpie.— A few were seen in early June, 1914 in the willows along the Walla Walla River east of Wallula, and some were observed in the sage-brush about a half-mile from the river. In the prairie area of Walla Walla and Columbia counties they are abundant in the timber along the streams throughout the year. They also wander long distances out into the bunch-grass hills.

Cyanocitta stelleri annectens. Black-headed Jay.—Reported in winter at Walla Walla (Bendire, 1895, 370). Abundant near Prescott some winters, but they do not appear every year. In late July, 1914, a

number of small flocks were seen in lowland fir forest near Hompeg Falls. On Aug. 3 one was seen in heavy Douglas spruce forest on top of a ridge near Twin Buttes R. S.

Perisoreus canadensis capitalis. Rocky Mountain Jay.—S. H. Lyman has observed this jay a number of times in the Blue Mountains at an altitude of 4000 feet or more, and has taken several specimens.

Corvus corax sinuatus. Mexican Raven.— Reported by Dawson and Bolles (1909, 5–9) from near Wallula and from the Blue Mountains.

Corvus brachyrhynchos hesperis. Western Crow.— A few were seen June 14, 1914 in willows near Wallula. Dawson (1914, 57) reports their presence near Wallula on May 3, 1907. On June 9, 1914, numbers were seen along the Touchet River several miles below Lamar. They are of occasional occurrence in the timber along the Touchet River near Prescott. Fairly large flocks have been seen in late summer and early fall in yellow pine forests, and in lowland fir and deciduous forests in the Blue Mountains.

Nucifraga columbiana. Clark's Nutreracker.— On July 28, 1914 several were seen in alpine fir forest on a ridge of the Blue Mountains.

Molothrus ater artemisiæ.¹ Nevada Cowbird.— On June 16, 1914 a few were noted in the willows along the Walla Walla River near Wallula. A number occur in summer near Prescott. They are most numerous in the timber along the Touchet River and in meadows, but wander a considerable distance into the open fields.

Xanthocephalus xanthocephalus. Yellow-headed Blackbird.—In 1914, several people reported the occurrence of this species about small swamps near Attalia and Wallula. They are also reported to have been seen near Waitsburg and Dayton in company with Red-wings.

Agelaius phœniceus neutralis. San Diego Red-wing.—Several were seen near Nine-mile in early June, 1914, about small cat-tail swamps caused by seepage from irrigation ditches. A few are found in summer at the edges of streams in the Touchet Valley near Prescott. They often feed on the meadows or in open brush not far from water.

Bendire reported Red-wings as regular winter residents at Walla Walla (Allen, 1881, 128), but they have not been observed near Prescott in winter. Spring arrival dates at Prescott are: March 8, 1905; April 3, 1906; March 2, 1908; and March 23, 1913.

Sturnella neglecta. Western Meadowlark.— Numerous in early June, 1914, on the bunch-grass hills near Wallula and Nine-mile. They occurred also in the sage-brush of the lower country near these places, but were much less numerous than in the bunch-grass. In the prairie area Meadowlarks are common throughout the year. They are characteristically prairie birds and do not go into thick brush, although they sometimes alight in the tops of tall trees or feed on the ground in open timber.

June 24, 1909, a nest with four eggs was found in a meadow two miles

¹ Grinnell, 1909, Univ. Calif. Publ. Zool., Vol. 5, p. 276.

east of Prescott. Another nest containing five eggs was found near the same place on June 5, 1913. In a third nest six blind nestlings were found July 7, 1915. A young bird able to fly was seen on May 9, 1913.

Icterus bullocki. Bullock's Oriole.—A few were seen in early June, 1914 in the willows along the Walla Walla River near Wallula, and one was noted in sage-brush a short distance from the river. Near Prescott they are common in summer wherever trees are found. They may also be seen occasionally on fences in the bunch-grass hills a mile or more from timber. At Lyon's Ferry several were seen in late June, 1914, in shade and orchard trees.

Spring arrival dates at Prescott are May 11, 1908; and May 14, 1913. In 1915 they were still numerous on Aug. 8. They nest commonly in the higher trees along the Touchet River. A male accompanied by several fledglings was seen July 10, 1915.

Euphagus cyanocephalus. Brewer's Blackbird.—Common in early June, 1914 in the willows east of Wallula. These birds commonly fed in the sage-brush within a half mile of the river. They are numerous in summer near Prescott. During the breeding season they are rather closely restricted to the vicinity of brush and swampy places, where they nest, but at other times they wander far out into the bunch-grass hills. They often follow plows or other farm implements to pick up insects.

Bendire (1895, 493) reported them a regular winter resident at Walla Walla, but there is no record of them in winter near Prescott. Spring arrival dates at Prescott are: April 24, 1905; and April 6, 1908. The first arrivals appear in flocks of ten to twenty-five individuals. In 1915 they were still numerous on Aug. 8.

Hesperiphona vespertina brooksi.¹ British Columbia Evening Grosbeak.—Irregularly present in winter in the timber along the Touchet River near Prescott. In the winter of 1904–05 they were numerous in large flocks. In that year they were last noted on April 19. In 1915 they first appeared on Nov. 22. A few were reported at Walla Walla between April 5 and 10, 1885 (Belding, 1890, 130). S. H. Lyman states that they are numerous in summer in the Blue Mountains, and that young birds have been seen in September beside the Touchet River at Dayton.

In winter at Prescott they commonly feed on sumac seeds, and have no difficulty in cracking these hard seeds in their bills.

Acanthis linaria linaria. Redpoll.— Several specimens at Whitman College were taken by S. H. Lyman in Columbia County.

Astragalinus tristis pallidus. Pale Goldfinch.— One was taken June 15, 1914, in sage-brush not far from the Walla Walla River east of Wallula. Near Prescott Goldfinches are common in winter, but are rare in summer. They occur at Walla Walla in winter (Belding, 1890, 136). One was seen at Lyon's Ferry on June 23, 1914. In summer they are

¹ Grinnell, Condor, January, 1917, p. 20.

closely restricted to the neighborhood of trees and brush, but in winter they wander a mile or more out into the bunch-grass.

A male was seen feeding a fledgling near Prescott on July 11, 1910.

Spinus pinus pinus. PINE SISKIN.—In the winter of 1904–05 Pine Siskins were numerous in small flocks in the trees and brush along the Touchet River near Prescott. They fed extensively on the seeds of the alder. None were observed later than March 5. They have been noted in early spring at Walla Walla (Belding, 1890, 139). A specimen from Walla Walla in the Whitman College collection was taken March 28, 1905. During July and August, 1914 several individuals were seen at the edge of the deciduous growth in the bottom of the canyon above Hompeg Falls. Others were seen on the ridges in Douglas spruce forest, in thick brush, and in open alpine fir forest, being most numerous in the latter.

Passer domesticus hostilis.¹ English Sparrow.— A small flock was noted at Prescott in February, 1908. This must have been about the date of their first arrival, although they had reached Walla Walla several years previously. They have now begun to spread out into the country, and a few have been noted around farm houses in the Touchet Valley.

Poœcetes gramineus confinis. Western Vesper Sparrow.— A specimen in the collection of Whitman College was taken at Walla Walla on April 20, 1904.

Passerculus sandwichensis alaudinus. Western Savannah Sparrow.—Abundant on September 16, 1909, in the bunch-grass and stubble-field hills near Prescott. In 1915 they first appeared on Aug. 28 and were common in the fields until Sept. 28. A few were seen in open timber.

Ammodramus savannarum bimaculatus. Western Grasshopper Sparrow.— Rare in the region near Prescott and not reported from any other part of the state (Dice, 1910, 217). A few were seen in June, 1908; June, 1910; and May, 1914. They were all seen at the edge of a wheat field along the base of a bunch-grass hill bordering the Touchet Valley two miles southeast of Prescott.

Chondestes grammacus strigatus. Western Lark Sparrow.— In June, 1914 a number were seen in the sage-brush near Wallula, being often found a mile or more from any other kind of habitat. On the bunch-grass hills near Wallula and Nine-mile they were abundant. They are reported from Walla Walla (Belding, 1890, 148). Near Prescott they are common in summer in the open parts of the valley. They do not go among trees, although they often reach the edge of brush and are found around barns. A number were seen at Lyon's Ferry in June, 1914.

Zonotrichia leucophrys gambeli. Gambeli's Sparrow.— The type locality is Wallula (Nuttall, 1840, 556). During the spring and fall migrations they are common in small flocks in the timber and brush along the Touchet River near Prescott. In 1908 they first appeared on April 5 and were still numerous on April 28. In 1913 they were first noted on April 25

and were still present on May 15. In 1915 they first appeared in the fall on Sept. 2, and left before Oct. 10. They were present in 1909 on Sept. 17. Bendire reported them a regular winter resident at Walla Walla (Allen, 1881, 128). A number remained throughout the winter of 1907–08 near Prescott, but in other years none remained in that region. At Walla Walla they are reported a not very common summer resident (Belding, 1890, 151). As they are not known to breed in Washington this statement may be questioned.

Spizella monticola ochracea. Western Tree Sparrow.—Type from Walla Walla (Brewster, 1882, 228). During the winter of 1907–08 a few flocks lived for a time in the brush and trees along the Touchet River near Prescott.

Spizella passerina arizonæ. Western Chipping Sparrow.—Abundant in summer along the Touchet River near Prescott. They prefer partially open timber or brush, but wander out into fields a half-mile or more. In the summer of 1914 they were found commonly in all of the forest and brush habitats of the Blue Mountains, from the bottoms of the canyons to the tops of the ridges, but were most numerous in brush and semi-open places on the ridges. Here large flocks of old and young were abundant in early August.

Spring arrival dates at Prescott are: April 25, 1905; May 3, 1908; and April 18, 1913. In 1915 they were last noted on Sept. 24.

They nest commonly in the trees and brush near Prescott. A freshly completed nest was found on May 8, 1908. Young able to fly were seen on June 10, 1908. A nest with nearly fledged young was found July 4, 1910. On June 26, 1914, from another nest four young flew away when approached. On July 6, 1914 an adult was seen feeding a juvenile cowbird.

Spizella breweri. Brewer's Sparrow.—Several juveniles were shot on the bunch-grass hills southeast of Wallula in early June, 1914. Adults and young were numerous in flocks in the bunch-grass on the hills north of the Walla Walla River at Nine-mile. In late June a number were seen and one specimen collected in the bunch-grass hills near Snake River on the road between Prescott and Lyon's Ferry.

Junco hyemalis shufeldti. Shufeldti's Junco.—Abundant in winter in the timber along the Touchet River near Prescott. They first appeared in 1915 on Sept. 4, and were abundant by Sept. 11. In 1905 they were not seen later in the spring than May 1. In 1913 they were still present on April 13. In the summer of 1914 they were common everywhere in the Blue Mountains from the bottoms of the canyons to the tops of the ridges, but seemed to be most abundant in buck-brush on the ridges.

Amphispiza nevadensis nevadensis. Sage Sparrow.— Reported by Snodgrass (1904, 231) to prevail everywhere in the western part of Walla Walla County. In 1914 none were observed near Wallula, but they were numerous in flocks in the bunch-grass and grain fields of the Lower Flat north of Nine-mile. One nearly grown individual was taken June 17.

Melospiza melodia merrilli. Merrilli's Song Sparrow. — A number were seen in early June, 1914, in the willows along the Walla Walla River near Wallula. At Prescott they are abundant throughout the year in the timber and brush along the Touchet River. Several flocks of young accompanied by parents were seen in the first week of August, 1914, in the brush along Butte Creek.

A nest found two miles east of Prescott on July 13, 1915, contained two well-feathered young. The nest was placed three feet above the ground in an arbor vitæ (not native) and was loosely woven of weeds and grasses,

some of which had been picked green.

Passerella iliaca schistacea. SLATE-COLORED FOX SPARROW.— Rare in summer in the thickest brush along the Touchet River near Prescott. On Aug. 2, 1914, one was seen in low brush in a western larch forest on the top of a ridge near Twin Buttes R. S. Another was seen on August 6 in brush along Butte Creek.

Spring arrival dates at Prescott are: March 11, 1905; April 3, 1906;

and April 14, 1908.

Pipilo maculatus curtatus. 1 Nevada Towhee. - A few occur in winter in the brush and timber along the Touchet River near Prescott. Bendire took specimens at Walla Walla (Brewster, 1882, 227).

Zamelodia melanocephala. Black-headed Grosbeak.—Several were seen in early June, 1914, in the willows along the Walla Walla River near Wallula. Near Prescott a few spend the summer along the Touchet River. They seem to prefer partially open timber and may often be seen in orchard trees. In 1915 they were last seen on Aug. 25. They breed at Walla Walla (Belding, 1890, 177).

Passerina amœna. Lazuli Bunting.— A few were seen early in June, 1914, at the edge of the willows along the Walla Walla River near Wallula. They are common in the cottonwoods and willows along the Touchet River at Prescott. At Walla Walla they are a common summer resident (Belding, 1890, 179).

Spring arrival dates at Prescott are May 8, 1908, and April 6, 1913. In

1915 they were last noted on Sept. 13.

Piranga ludoviciana. Western Tanager.— Rare in summer in the timber along the Touchet River near Prescott. During July and August, 1914, one was seen in yellow pine forest on a low ridge of the Blue Mountains; they were common in lowland fir forest near Hompeg Falls; one was seen in western larch forest nearby; and several were noted in deciduous timber beside Butte Creek.

Spring arrival dates at Prescott are: May 19, 1906; May 24, 1908; and May 14, 1913.

Petrochelidon lunifrons lunifrons. CLIFF SWALLOW. - Nesting in great numbers on the rock cliffs overlooking Snake River at Lyon's Ferry. On June 23, 1914, many of the young at this place were nearly full fledged. A few nest in barns and other buildings in the Touchet Valley near Prescott. A number of nests were observed on June 17 in a road tunnel under the railroad tracks near Lamar.

Hirundo erythrogastra. Barn Swallow.— One nest was seen on June 9, 1914, in a barn near the Walla Walla River at Nine-mile. A few also nest in barns near Prescott. Reported to be common at Walla Walla in summer (Belding, 1890, 188).

Tachycineta thalassina lepida. Northern Violet-Green Swallow.— In June, 1914, a number were seen near Wallula, flying over sagebrush and over the meadows near the Walla Walla River. One was observed drinking from the river while on the wing. A few feed over meadows in the Touchet Valley near Prescott. In 1908 they first appeared near Prescott on April 2.

Riparia riparia. Bank Swallow.— A few occur along the Touchet River at Prescott. A nest hole was noted May 19, 1914, in a soft dirt bank. S. H. Lyman reports their occurrence at Dayton.

Stelgidopteryx serripennis. Rough-winged Swallow.— Numerous in summer over the fields of the valleys near Prescott. They are quite often seen to perch in bushes or trees at the edge of the timber or on fences or telephone lines. One was taken on May 26, 1914. Reported from Walla Walla (Belding, 1890, 194).

Bombycilla garrula. Bohemian Waxwing.— A flock of 150 was seen in the timber near Prescott on Dec. 25, 1908, and a smaller flock noted Feb. 26, 1905. S. H. Lyman reports that they occur commonly at Dayton. Bendire took specimens at Walla Walla (Brewster, 1882, 227).

Bombycilla cedrorum. Cedar Waxwing.— A small flock was seen in timber near Prescott on April 15, 1908. Several individuals were seen in cherry trees on June 13. Bendire took specimens at Walla Walla (Brewster, 1882, 227). S. H. Lyman reports that they breed in the Blue Mountains.

Lanius borealis. Northern Shrike.— Bendire took specimens at Walla Walla (Brewster, 1882, 227). One was seen in a field of the Touchet Valley near Prescott on Nov. 16, 1915. S. H. Lyman states that they are not uncommon in the region in winter.

Lanius ludovicianus excubitorides. White-rumped Shrike.—Numerous during June, 1914, in the sage-brush east of Wallula. A few lived near farm buildings. Several were seen in the bunch-grass near the tops of the hills north of Nine-mile. They were common in the bunch-grass and grain fields of Eureka Flat.

Vireosylva olivacea. Red-Eyed Vireo.—Reported not very rare at Walla Walla (Belding, 1890, 199). Snodgrass (1904, 232) found them along the Touchet River in eastern Walla Walla County. S. H. Lyman reports that they occur in the Blue Mountains.

Vireosylva gilva swainsoni. Western Warbling Vireo.— Common in summer in the timber along the Touchet River near Prescott. In 1913 the first arrival was noted April 26.

Vol. XXXV 1918

Lanivireo solitarius cassini. Cassin's Vireo.—S. H. Lyman reports them to be common in the Blue Mountains in summer. A specimen in the Whitman College collection was taken there Sept. 9, 1900.

Vermivora rubricapilla gutturalis. Calaveras Warbler.— Dawson and Bolles (1909, 176) report the appearance of this species at Wallula

on April 23, 1905.

Dendroica æstiva æstiva. Eastern Yellow Warbler.—Several were seen in early June, 1914 in the willows along the Walla Walla River east of Wallula. They are common in summer in the trees and brush along the Touchet River at Prescott. One was seen June 24, 1914, in some locust trees planted beside Snake River at Lyon's Ferry. They are common in summer at Walla Walla (Belding, 1890, 209).

Spring arrival dates at Prescott are: May 19, 1906; May 18, 1908;

and May 14, 1913.

Dendroica auduboni auduboni. Audubon's Warbler.— Common during migration in the trees along the Touchet River at Prescott. In 1913 they were first noted on April 19. In 1915 fall migrants appeared on Sept. 3.

Dendroica townsendi. Townsend's Warbler.— A juvenile was seen in an orchard near Prescott on Aug. 8, 1915. A female was collected on July 23, 1914, from some bushes in the canyon near Hompeg Falls.

Seiurus noveboracensis notabilis. Grinnell's Water-Thrush.—One was seen Sept. 11, 1915, in some shrubbery near the Touchet River two miles east of Prescott. The bird was seen at close range and carefully studied.

Oporornis tolmiei. Macgillivray's Warbler.— Numerous in summer in the timber along the Touchet River at Prescott. They feed mostly on the ground or in very low bushes, but the males go higher to sing. A female was taken Aug. 7, 1914, in thick brush beside Butte Creek in the Blue Mountains. They were present at Prescott as late as Sept. 3 in 1905, and in 1915 one was seen Sept. 9.

Geothlypis trichas occidentalis. Western Yellow-throat.—Occasional in summer in thick brush along the Touchet River at Prescott. Reported common in summer at Walla Walla (Belding, 1890, 218). In

1906 males first appeared at Prescott on May 13.

Icteria virens longicauda. Long-tailed Chat.— Several were seen in the willows along the Walla Walla River near Wallula on June 16, 1914. Near Prescott a number spend the summer in the timber along the Touchet River. They are reported from Walla Walla (Belding, 1890, 265).

Wilsonia pusilla pileolata. PILEOLATED WARBLER.— A few were seen May 18, 1913, in trees along the Touchet River east of Prescott. In 1915 fall migrants appeared Aug. 22, and were common until Sept. 13.

Setophaga ruticilla. Redstart.— Several were seen during June, 1908 in the timber along the Touchet River two miles east of Prescott. A nest was begun in a pear tree by a female about June 15 and was later

finished, but no eggs were ever laid in it. Bendire shot an adult male near Walla Walla (Brewer, 1880, 50).

Anthus rubescens. Pipit.— Abundant in flocks on the prairie hills near Prescott during migrations. Reported at Walla Walla (Belding, 1890, 265). A spring record at Prescott is April 29, 1908. In 1909 they were noted on Sept. 16. In 1915 they were first noted on Sept. 25 and were present until Nov. 7.

Cinclus mexicanus unicolor. DIPPER.— Numerous along the streams in the Blue Mountains. In the last week of July, 1914, a number were observed on the North Fork of the Touchet River near Hompeg Falls, and in the first week of August many were seen along Butte Creek.

Dumetella carolinensis. Catbird.—Several were seen in early June, 1914 in the willows along the Walla Walla River east of Wallula. They are common in summer in the thick brush along the Touchet River near Prescott, and are sometimes found in orchards. Reported rare at Walla Walla in 1885 (Belding, 1890, 226).

Spring arrival dates at Prescott are: May 31, 1908; and May 24, 1914. In 1915 they were still present on Aug. 31.

Salpinctes obsoletus obscletus. Rock Wren.— Numerous in early June, 1914, on a rocky hillside southeast of Wallula. Several, including a fledgling just able to fly, were seen June 16 in a little ravine in the bunchgrass of a nearby hillside. In late June, 1914, they were numerous about the rock cliffs and slopes near Lyon's Ferry, and a few were seen in the adjacent bunch-grass. On Sept. 16, 1909, one was collected from a fence on a hill southeast of Prescott. In late July, 1914, several were seen about rock exposures on the sides of the canyon near Hompeg Falls.

Troglodytes aëdon parkmani. Western House Wren.—A number spend the summer in the timber along the Touchet River near Prescott. Spring arrival dates are: May 3, 1905; April 9, 1909; and April 21, 1913. In 1915 they were last noted on Aug. 25.

Nests were found May 13, 1906, and June 18, 1913, both in holes in decaying limbs of cherry trees. Another nest on a sill in a farm building held six naked young on July 1, 1915.

Nannus hiemalis pacificus. Western Winter Wren.— Common during late July, 1914, in the lowland fir forest at Hompeg Falls. One was seen on July 29 in damp Douglas spruce forest near the top of the ridge at Twin Buttes R. S. In 1915 migrants appeared near Prescott on Sept. 8, and the species was last seen on Oct. 13.

Telmatodytes palustris plesius. Western Marsh Wren.—Reported from Walla Walla by Oberholser (1897, 189). One was seen Aug. 5, 1914, in the brush at the edge of a small beaver-dam swamp beside Butte Creek.

Certhia familiaris montana. ROCKY MOUNTAIN CREEPER.—A number were present during December, 1908 in the trees along the Touchet River east of Prescott. In the winter of 1915 they first appeared on Dec. 11. A female and a flock of young were seen July 26, 1914, in lowland fir

timber near Hompeg Falls. The female had the tail feathers worn down to stubs not over three-fourths of an inch in length.

Sitta carolinensis aculeata. SLENDER-BILLED NUTHATCH.— One was seen Aug. 7, 1913, in a cherry orchard east of Prescott. A specimen from the Blue Mountains is in the Whitman College collection.

Sitta canadensis. Red-breasted Nuthatch.—Occasional, except perhaps in summer, in the timber along the Touchet River near Prescott. In 1908 they were still at Prescott on June 20, and in 1915 the first was seen Sept. 5. In late July and early August, 1914, numbers were noted on the ridges of the Blue Mountains. They were numerous in western larch and in Douglas spruce, and one was seen in alpine fir forest.

Sitta pygmæa pygmæa. Pygmy Nuthatch.— Reported common in the forests of the Blue Mountains in Columbia County by S. H. Lyman, who has examined two or three nests.

Penthestes atricapillus septentrionalis. Long-tailed Chickadee. — Several were seen in the willows along the Walla Walla River east of Wallula in early June, 1914. At Prescott they are a common resident in the timber along the Touchet River. In late July, 1914, they were common in lowland fir forest near Hompeg Falls. One flock was seen on Aug. 5 in the brush beside Butte Creek.

Nests in process of construction have been found near Prescott on April 7, 1906; April 9, 1906; April 9, 1913; and April 10, 1913. In each case the nest was excavated in the decayed wood of orchard or shade trees. In early June, 1908 several flocks of nearly fledged young accompanied by both parents were seen.

The process of nest excavation was watched for a short time on April 10, 1914. This nest was being excavated in the rotten heart of a pear tree, and entrance was obtained through the end of a stub about four feet from the ground. The male and female took part equally in the work, and the labors were continued throughout the day. A vigorous pecking could be heard while either bird was at work. The excavated material was carried in the bill a distance of ten yards or more from the nest before being dropped. It was not dropped in the same place each time, but was scattered over a wide area. Usually the birds alighted on some branch before dropping the debris, but sometimes it was dropped while the bird was flying. As soon as one bird left the hole the other entered immediately. Sometimes the bird outside had to wait a short time. Between 12 M. and 1 P. M. the average time each bird spent in the nest hole was thirty seconds and the shortest time four seconds.

Penthestes gambeli gambeli. Mountain Chickadee.—In the winter of 1905–06 several flocks lived in the trees along the Touchet River east of Prescott. They did not associate with the long-tailed chickadees, but the two species fought when they met. In the summer of 1914 several were seen on the high ridges of the Blue Mountains in alpine fir forest, in western larch forest, and in Douglas spruce forest. Some were seen in yellow pine and in Douglas spruce forests on the low ridges near Hompeg Falls, but none were observed in the canyons.

Penthestes rufescens rufescens. Chestnut-Backed Chickadee.—During the winter of 1905–06 several were seen in the timber along the Touchet River east of Prescott. Often they were associated with flocks of long-tailed chickadees. On July 23, 1914, one was seen with a flock of Long-tailed Chickadees in lowland fir forest near Hompeg Falls.

Regulus satrapa olivaceus. Western Golden-Crowned Kinglet.—Numerous in the fall at Prescott, arriving on Sept. 13, in 1905, and on Sept. 9 in 1915. In 1906 a flock was seen on Dec. 26. In late July, 1914, flocks of young accompanied by parents were numerous in lowland fir forest near Hompeg Falls, and a few were seen in Douglas spruce forest on the mountain slopes. Others were observed in alpine fir forest on the higher ridges.

Regulus calendula calendula. Ruby-Crowned Kinglet.— Numerous in winter in the timber along the Touchet River at Prescott. Individuals are often associated with flocks of long-tailed chickadees. In 1908 they were still present on April 12. In 1913 they were numerous and in song on April 18. In 1915 the first fall arrival appeared Sept. 6.

Myadestes townsendi. Townsend's Solitaire.—A number remained throughout the winters of 1904–05 and 1905–06 in the timber along the Touchet River east of Prescott. In 1905 they were last seen on April 5. At the edge of Douglas spruce forest on a low slope near Hompeg Falls several were seen on July 23, 1914. One of these was carrying food in its bill. One was seen in open alpine fir forest on the ridge near Twin Buttes R. S. on July 31.

Hylocichla ustulata swainsoni. OLIVE-BACKED THRUSH.— Reported from Walla Walla (Belding, 1890, 253). Noted in lowland fir forest near Hompeg Falls in late July, 1914.

Hylocichla guttata subsp. Hermit Thrush.— Reported common in summer at Walla Walla (Belding, 1890, 254). S. H. Lyman reports them quite common in the Blue Mountains. One was seen among shrubs near the Touchet River east of Prescott on Sept. 11, 1915.

Planesticus migratorius propinquus. Western Robin.— In early June, 1914, a number were seen in the willows along the Walla Walla River east of Wallula. In the prairie area of Walla Walla and Columbia counties they are abundant in summer in the meadows and timber along the streams. They range a mile or more out into the bunch-grass hills and often are found in trees about isolated farm houses. A few remain throughout the winter. During the breeding season they may often be seen at the edge of the river securing mud to plaster their nests. In the late summer of 1914 a few were seen in yellow pine forest near Hompeg Falls and in the same kind of forest on a low ridge near the Oregon line. On the ridge near Twin Buttes R. S. they were seen in western larch forest. On Butte Creek they were numerous in the deciduous timber. One was seen in a small opening in the lowland fir forest near Hompeg Falls.

The main migration appeared at Prescott in 1905 during the last week of February. In 1915 they had nearly all left before Sept. 1. In 1906 a blizzard began on March 10, when the early spring migration was in full

swing, and on March 15 the temperature reached as low as -1° F. at Prescott. With the ground partly covered by snow, thousands died before the weather moderated.

A nest found on April 23, 1906, two miles east of Prescott in an apple tree, contained one egg. On April 27 there were three eggs and later another was added. On May 3 one of the eggs was missing and the nest contained the headless body of a White-footed Mouse (Peromyscus maniculatus gambelii), which the robin was brooding with the eggs. On May 6 all the eggs were gone and the nest deserted. Another nest was found on April 28, 1906, and still another on May 13. On May 2, 1908, a freshly completed nest was found 20 feet high in a locust tree. One egg was laid between 8:30 and 9:15 A. M. on May 4. Another egg was laid between 9:30 and 10:30 A. M. on May 5. The female was disturbed while on the nest late on this evening and the nest was abandoned. On May 8, 1908, three nests, all in the last stages of construction, were found. Half-fledged and nearly-fledged young were abundant in early June, 1908. On April 9, 1913, a nest nearly completed was found. In 1915 a nest containing fully-fledged young was seen June 30. On May 18, 1908, a pest containing one egg was found on a post in a barn in the hills southwest of Prescott. On May 28 it contained four eggs. This nest was constructed of string, horse hair, and straw, but, probably owing to the scarcity of water, very little mud was used to plaster the nest.

Ixoreus nævius nævius. Varied Thrush.— During the blizzard of early March, 1906, great numbers appeared near Prescott and many were killed. One was seen on April 1, 1913, and another on April 20 in the trees along the Touchet River. In 1915 they were noted rarely from Nov. 7 to Dec. 3. S. H. Lyman has seen them in the Blue Mountains in the fall and says they often appear in winter at Dayton.

Sialia mexicana occidentalis. Western Bluebird.— Reported at Walla Walla (Belding, 1890, 262). From Nov. 13 to 15, 1915, a small flock was observed in an open field of the Touchet Valley and at the edge of timber near Prescott. On July 23, 1914, several were seen in yellow pine forest near Hompeg Falls.

Sialia currucoides. Mountain Blueber.— Dawson and Bolles (1909, 260) give a breeding record for Wallula. One was seen June 18, 1914, on a telephone post in the prairie near Eureka. They occur sparingly in summer in the bunch-grass hills in the neighborhood of Prescott, and some are reported to breed in the town. In late July and early August, 1914 numbers were seen in open alpine fir forest on high ridges of the Blue Mountains, and a few were seen in yellow pines on a lower ridge.

Spring arrival dates near Prescott are March 14, 1905 and March 4, 1908.

BIBLIOGRAPHY.

ALLEN, J. A.

1881. Winter birds of Fort Walla Walla, W. T. Bull. Nutt. Orn. Club, 6, 128.

BELDING, LYMAN.

1890. Land birds of the Pacific district. Occas. Papers Calif. Acad. Sci., 2, 274 pp.

Bendire, C. E.

1888. Notes on the habits, nests, and eggs of the genus Sphyrapicus Baird. Auk, 5, 225-240.

1888a. Notes on the habits, nests, and eggs of the genus *Glaucidium* Boie. Auk, **5**, 366–372.

1892. Life-histories of North American birds, with special reference to their breeding habits and eggs. Smithsonian Contrib. Knowl., 28, x + 446 pp., 12 col. pls.

1895. Ibid. From the parrots to the grackles. Smithsonian Contrib. Knowl., **32**, x + 518 pp., 7 col. pls.

Brewer, T. M.

1880. The Redstart in Washington Territory. Bull. Nutt. Orn. Club, 5, p. 50.

Brewster, W.

1882. Notes on some birds collected by Capt. Charles Bendire at Fort Walla Walla, Washington Territory. Bull. Nutt. Orn. Club, 7, 225–233.

DAWSON, W. L.

1908. New and unpublished records from Washington. Auk, 25, 482-485.

1914. An Asionine ruse. Condor, **16**, 56–57.

DAWSON, W. L., AND BOWLES, J. H.

1909. The birds of Washington. (Occidental Publ. Co., Seattle) 2 vol., xiv + 997 pp., numerous unnumbered pls. and figs.

DICE, LEE R.

1910. New records for the State of Washington. Auk, 27, 217–218.

1915. First specimens of Baird Sandpiper from the State of Washington. Condor, 17, 60.

1916. Distribution of the land vertebrates of southeastern Washington. Univ. Calif. Publ. Zoöl., 16, 293–348, pls. 24–26, 2 figs.

NUTTALL, THOMAS.

1840. Manual of the ornithology of the United States and Canada.

The land birds. Ed. 2, with additions, (Hilliard, Boston), viii + 832 pp., 54 figs.

OBERHOLSER, H. C.

1897. Critical remarks on Cistothorus palustris (Wils.) and its western allies. Auk, 14, 186–196.

1904. A revision of the American Great Horned Owls. Proc. U. S. Natl. Mus., 27, 177–192.

RIDGWAY, R.

1914. The birds of North and Middle America. U. S. Natl. Mus., Bull., 50, part 6, xx + 882 pp., 36 pls.

SNODGRASS, ROBERT E.

1904. A list of land birds from central and southeastern Washington. Auk, 21, 223–233.

TOWNSEND, J. K.

1839. Narrative of a journey across the Rocky Mountains to the Columbia River, and a visit to the Sandwich Islands, Chili, etc.; with a scientific appendix. (H. Perkins, Philadelphia), viii (9) 352 pp.

A STUDY OF THE YELLOW-BILLED CUCKOO.

BY CLARA KERN BAYLISS.

ON July 24, 1916, I found a Yellow-billed Cuckoo's nest, with the bird incubating, ten feet from the ground on the horizontal branch of a small elm. Not having my "periscope" (an adjustable mirror at the top of a bamboo pole) with me, I assisted a little girl who had accompanied me, to climb the tree; and she reported that the nest contained three green eggs, one of them smaller and darker than the other two. As seen through the mirror next day I should describe the smaller as bluish-green and the others as greenish-blue.

July 29, at 6.30 P. M. the eggs were there as usual and the bird remained on the nest until I was almost under her, giving me an opportunity to note her yellow bill and her graceful, horizontal flight as she slipped noiselessly into another tree. The following day was Sunday and was exceedingly hot as was Monday forenoon. In the afternoon of Monday, July 31, there was a severe storm and the nest was not visited until the forenoon of Aug. 1, when there were three young birds in it, all black as ink, the two larger with black hairs (or quill cases) and the smaller with white